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Manual: 13A—Quality and Requirements

Management Program Documents

1. PURPOSE

This Program Requirements Document (PRD) identifies responsibilities and requirements for the *indoctrination* (see def.), *training* (see def.), and *qualification* (see def.) of personnel performing or managing *activities affecting quality* (see def.). See Appendix A for requirements basis.

2. APPLICABILITY

This PRD applies to company organizations and personnel involved in the indoctrination, training, and qualification of personnel.

3. RESPONSIBILITIES

3.1 Company Personnel

All company personnel are responsible for complying with the indoctrination, training, and qualification requirements applicable to their job assignment, and maintaining their job proficiency.

3.2 Organization Managers

All organization managers are responsible for ensuring that their personnel comply with requirements for indoctrination, training, and qualification of personnel, and that suitable proficiency is achieved and maintained.

4. **REQUIREMENTS**

4.1 Companywide Applications

The requirements identified in this subsection (4.1) apply to the entire company unless exempted by INT-17, QA PRD Introduction, and Subsection 2.

4.1.1 **Basic**

4.1.1.1 The quality assurance program shall provide for indoctrination, training and qualification, as necessary, of personnel performing or managing activities affecting quality to assure that suitable proficiency is achieved and maintained. [NQA-1-1997, Requirement 2, 100(b)]

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4.1.1.2 The employer may delegate qualification examination activities to an independent certifying agency, but shall retain responsibility for conformance of the examination and its administration. [NQA-1-1997, Requirement 2, 400(b) 2s]

4.1.2 Indoctrination and Training

- 4.1.2.1 Indoctrination and training shall be commensurate with the scope, complexity, and importance of the activities; and the education, experience, and proficiency of the personnel. [NQA-1-1997, Requirement 2, 200]
- 4.1.2.2 Personnel performing or managing activities affecting quality shall receive indoctrination in their job responsibilities and authority; general criteria, including applicable codes and standards, regulatory commitments, company procedures, and quality assurance program requirements. [NQA-1-1997, Requirement 2, 201]
- 4.1.2.3 The need for a formal training program for personnel performing or managing activities affecting quality shall be determined. Training shall be provided, if needed, to achieve initial proficiency, maintain proficiency, and adapt to changes in technology, methods, or job responsibilities. [NQA-1-1997, Requirement 2, 202; DOE/RW-0333P 2.2.12.A.2]

4.1.3 Qualification Requirements

- 4.1.3.1 The responsible organization shall designate those activities that require qualification of personnel and the minimum requirements for such personnel. [NQA-1-1997, Requirement 2, 300 1s]
- 4.1.3.2 The responsible organization shall establish written procedures for the qualification of personnel, and for the assurance that only those personnel who meet the requirements are permitted to perform these activities. [NOA-1-1997, Requirement 2, 300 2s]
- 4.1.3.3 Specific qualification requirements for personnel performing nondestructive examination (NDE), *inspection* (see def.) and *tests* (see def.) to verify quality, and auditing are as follows [NQA-1-1997, Requirement 2, 300 3s]:

Nondestructive Examination

A. Personnel who perform NDE including radiographic (RT), magnetic particle (MT), ultrasonic, (UT), liquid penetrant (PT), electromagnetic (ET), neutron radiography (NR), leak testing (LT), acoustic emission (AE), and visual testing (VT) to verify conformance to specified requirements shall be qualified in the

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requirements of the American Society of Nondestructive Testing Recommended Practice No. SNT-TC-1A, December 1988 Edition, and its applicable Supplements. [NQA-1-1997, Requirement 2, 301]

Inspection and Test

NOTE:

The requirements in C, D, and E below do not apply to personnel who are not involved in nondestructive examination or inspection/test activities that are established and controlled by the Quality Assurance organization.

- B. The initial capabilities of an inspection and test candidate shall be determined by an evaluation of the candidate's education, experience, training, and either test results or capability demonstration. [NQA-1-1997, Requirement 2, 302 1s]
- C. The job performance of inspection and test personnel shall be reevaluated at periodic intervals not to exceed three years. [NQA-1-1997, Requirement 2, 302 2s]
- D. Reevaluation of inspection and test personnel job performance shall be by evidence of continued satisfactory performance or redetermination of capability in accordance with the requirements of Section 4.1.2, Indoctrination and Training, of this PRD. If during this evaluation, or at any other time, it is determined by the responsible organization that the capabilities of an individual are not in accordance with the qualification requirements specified for the job, that person shall be removed from that activity until such time as the required capability has been demonstrated. [NQA-1-1997, Requirement 2, 302 3s and 302 4s]
- E. Any person who has not performed inspection or testing activities in the qualified area for a period of one year shall be reevaluated. [NQA-1-1997, Requirement 2, 302 5s]

Auditing

F. Qualification/certification requirements for quality assurance *auditors/lead auditors* (see def.) and *technical specialists* (see def.) shall be as identified in PRD-5073, 2.3 Auditor/Lead Auditor Qualification and Certification. [NQA-1-1997, Requirement 2, 303, 304, and 400; DOE/RW-0333P 18.2]

4.1.4 Records

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- 4.1.4.1 All records designated in implementing documents as *quality* assurance records (see def.) shall be controlled in accordance with PRD-5088, 17.1 Quality Assurance Records. [Summary of records requirements from NQA-1-1997, DOE/RW-0333P, and Company Imposed Requirements]
- 4.1.4.2 Records of qualification, including requalification for auditors and lead auditors and for inspection and test personnel, shall be established and maintained by the employer for indoctrination and training.

 [NQA-1-1997, Requirement 2, 500 2s]
- **NOTE:** Records of the implementation for indoctrination and training may take the form of attendance sheets, training logs, or personnel training records. [NQA-1-1997, Requirement 2, 500 1s]

4.2 Specific Requirements for DOE/RW-0333P QARD Revision 10 Applications

This subsection (4.2) contains additional requirements from the QARD (DOE/RW-0333P, Revision 10) which are specific to the Spent Nuclear Fuel Program.

4.2.1 Personnel Indoctrination and Training

- 4.2.1.1 Each *affected* organization (see def.) shall indoctrinate and train personnel as follows [DOE/RW-0333P 2.2.12.A]:
 - A. Determine required indoctrination and training. [DOE/RW-0333P 2.2.12.A.1]
 - B. Ensure personnel are indoctrinated and trained, as needed to achieve initial proficiency and adapt to changes in technology, methods, or job responsibilities. [DOE/RW-0333P 2.2.12.A.2]
 - C. Evaluate and assess the need for additional indoctrination and training as assignments, positions, or implementing documents change. [DOE/RW-0333P 2.2.12.A.3]
 - D. Ensure indoctrination and training are completed prior to performing the work. [DOE/RW-0333P 2.2.12.A.4]
 - E. Ensure personnel are indoctrinated in the following topics as they relate to a particular function [DOE/RW-0333P 2.2.12.A.5]:
 - 1. general criteria, including the QARD, applicable codes, regulations, and standards [DOE/RW-0333P 2.2.12.A.5.a]
 - 2. applicable implementing documents [DOE/RW-0333P 2.2.12.A.5.b]

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- 3. job responsibilities and authority. [DOE/RW-0333P 2.2.12.A.5.c]
- 4.2.1.2 For personnel who perform or manage design, *scientific investigations* (see def.), *software* (see def.) development activities, and for personnel who verify or manage the verification of design, scientific investigation, software development activities, or *items* (see def.), affected organizations shall ensure that *[DOE/RW-0333P 2.2.12.B]*:
 - A. Descriptions are established for the positions these personnel occupy. [DOE/RW-0333P 2.2.12.B.1]
 - B. Minimum education and experience requirements are established for each position commensurate with the scope, complexity, and nature of the work or documented justification is provided for positions for which no specific minimum education and experience is required. [DOE/RW-0333P 2.2.12.B.2 and 2.2.12.B.3.2s]
 - C. Personnel have experience and education commensurate with the minimum requirements established. [DOE/RW-0333P 2.2.12.B.3.1s]
 - D. Minimum education and experience are verified or, when minimum education and experience cannot be verified, documented justification is provided for the personnel assignment. [DOE/RW-0333P 2.2.12.B.4]

5. **DEFINITIONS**

Refer to LST-199, Definitions, in the QA PRD Manual for the definitions of the following terms:

activities affecting quality
affected organization
auditor
indoctrination
inspection
item
lead auditor
qualification (personnel)
quality assurance record

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scientific investigation

software

technical specialist

test

training

6. REFERENCES

ASME NQA-1-1997, Quality Assurance Requirements for Nuclear Facility Applications

DOE/RW-0333P, Office of Civilian Radioactive Waste Management, Quality Assurance Requirements and Description, Revision 10

7. APPENDICES

Appendix A, 2.2 Basis

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APPENDIX A

2.2 Basis

| Source | Citation | Requirement | Comments |
|--|---------------------------------|--------------|-------------------------------|
| ASME NQA-1-1997, Quality Assurance Requirements for Nuclear Facility Applications, Requirement 2 | 100 (b) | 4.1.1.1 | Consensus Requirement (CR) |
| NQA-1-1997, Requirement 2 | 200 | 4.1.2.1 | CR |
| NQA-1-1997, Requirement 2 | 201 | 4.1.2.2 | CR |
| NQA-1-1997, Requirement 2 | 202 | 4.1.2.3 | CR |
| NQA-1-1997, Requirement 2 | 300 1s | 4.1.3.1 | CR |
| NQA-1-1997, Requirement 2 | 300 2s | 4.1.3.2 | CR |
| NQA-1-1997, Requirement 2 | 300 3s | 4.1.3.3 | CR |
| NQA-1-1997, Requirement 2 | 301 | 4.1.3.3.A | CR |
| NQA-1-1997, Requirement 2 | 302 1s | 4.1.3.3.B | CR |
| NQA-1-1997, Requirement 2 | 302 2s | 4.1.3.3.C | CR |
| NQA-1-1997, Requirement 2 | 302 3s and 302 4s | 4.1.3.3.D | CR |
| NQA-1-1997, Requirement 2 | 302 5s | 4.1.3.3.E | CR |
| NQA-1-1997, Requirement 2 | 303, 304, and 400 | 4.1.3.3.E | CR |
| NQA-1-1997, Requirement 2 | 400(b) 2s | 4.1.1.2 | CR |
| NQA-1-1997, Requirement 2 | 500 2s | 4.1.4.2 | CR |
| NQA-1-1997, Requirement 2 | 500 1s | 4.1.4.2 Note | CR |
| DOE/RW-0333P, Office of Civilian Radioactive Waste Management Program, Quality Assurance Requirements and Description, Revision 10 | 2.2.12.A.2 | 4.1.2.3 | CR |
| DOE/RW-0333P | 2.2.12.A | 4.2.1.1 | Specific Requirement (SR) |
| DOE/RW-0333P | 2.2.12.A.1 | 4.2.1.1.A | SR |
| DOE/RW-0333P | 2.2.12.A.2 | 4.2.1.1.B | SR |
| DOE/RW-0333P | 2.2.12.A.3 | 4.2.1.1.C | SR |
| DOE/RW-0333P | 2.2.12.A.4 | 4.2.1.1.D | SR |
| DOE/RW-0333P | 2.2.12.A.5 | 4.2.1.1.E | SR |
| DOE/RW-0333P | 2.2.12.A.5.a | 4.2.1.1.E.1 | SR |
| DOE/RW-0333P | 2.2.12.A.5.b | 4.2.1.1.E.2 | SR |
| DOE/RW-0333P | 2.2.12.A.5.c | 4.2.1.1.E.3 | SR |
| DOE/RW-0333P | 2.2.12.B | 4.2.1.2 | SR |
| DOE/RW-0333P | 2.2.12.B.1 | 4.2.1.2.A | SR |
| DOE/RW-0333P | 2.2.12.B.2 and 2.2.12.B.3.2s | 4.2.1.2.B | SR |
| DOE/RW-0333P | 2.2.12.B.3.1s | 4.2.1.2.C | SR |
| DOE/RW-0333P | 2.2.12.B.4 | 4.2.1.2.D | SR |
| DOE/RW-0333P | 18.2 | 4.1.3.3.E | CR |

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APPENDIX A

2.2 Basis

| Source | Citation | Requirement | Comments |
|--|----------|-------------|---|
| PRD-5088, 17.1 Quality Assurance Records | All | 4.1.4.1 | Summary of records requirements from NQA-1-1997, DOE/RW-0333P, and Company Imposed Requirements |